CLAIMS

1. Method for measuring the movement of a solid (2, 16, 32), a method in which at least one first translation of this solid is measured, this method comprising a series of steps of measurement of the acceleration of the solid and double integration of the measurements made, to obtain successive values of the first translation,

this method being characterized in that it also comprises a series of steps of absolute measurement of at least one second degree of freedom of the solid, this second degree of freedom being a rotation, by means of at least one rotation sensor (6, 8), and in that this measurement of rotation is converted into a measurement of translation, and this translation measurement is used to update the first translation.

2. Method as in claim 1, wherein the measurement of the second degree of freedom, obtained at this step, is used as initial condition to obtain by double integration the value of the first translation which follows the previously obtained values of this first translation.

3. Method as in either of claims 1 and 2, wherein each absolute measurement step is made at the same time as a measurement step of the acceleration of the solid (2, 16, 32).

4. Method as in any of claims 1 to 3, wherein the conversion of the measurement of rotation

into a measurement of translation uses kinetic models of the solid and/or of its movement, enabling determination of the relationships between the rotation and translation.

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5.   Method as in any of claims 1 to 4, wherein the rotation sensor is chosen from among accelerometers (6) and magnetometers (8).

10   6.   Method as in any of claims 1 to 5, wherein the first translation is measured using a translation sensor which is also the rotation sensor.

7.   Method as in any of claims 1 to 6, 15 wherein a criterion of slowness of movement is chosen, and if the movement meets this criterion after one of the measurement steps of the second degree of freedom, the measurement of the second degree of freedom obtained at this step is used to update the first 20 translation.

8.   Method as in claim 7, wherein the criterion of slowness of movement is the lying of a function of the acceleration norm of the solid (2, 16, 25 32) below a predetermined threshold.

9.   Method as in claim 8, wherein the function of the acceleration norm of the solid (2, 16, 32) is this norm itself.